



[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2013-1019; Directorate Identifier 2013-CE-038-AD; Amendment 39-17810; AD 2014-06-06]

RIN 2120-AA64

Airworthiness Directives; SOCATA Airplanes

AGENCY: Federal Aviation Administration (FAA), Department of Transportation (DOT).

ACTION: Final Rule.

SUMMARY: We are adopting a new airworthiness directive (AD) for SOCATA Model TBM 700 airplanes. This AD results from mandatory continuing airworthiness information (MCAI) issued by an aviation authority of another country to identify and correct an unsafe condition on an aviation product. The MCAI describes the unsafe condition as landing gear actuator rod and piston becoming unscrewed during operation and the landing gear actuator ball joint becoming uncrimped. We are issuing this AD to require actions to address the unsafe condition on these products.

DATES: This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of certain publications listed in the AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: You may examine the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2013-1019; or in person at Document Management Facility, U.S. Department of Transportation,

Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue, SE., Washington, DC 20590.

For service information identified in this AD, contact SOCATA - Direction des Services – 65921 Tarbes Cedex 9 – France; telephone +33 (0) 62 41 7300, fax +33 (0) 62 41 76 54, or for North America: SOCATA NORTH AMERICA, 7501 South Airport Road, North Perry Airport, Pembroke Pines, Florida 33023; telephone: (954) 893-1400; fax: (954) 964-4141; email: mysocata@socata.daher.com; Internet: <http://mysocata.com>. You may view this referenced service information at the FAA, Small Airplane Directorate, 901 Locust, Kansas City, Missouri 64106. For information on the availability of this material at the FAA, call (816) 329-4148.

FOR FURTHER INFORMATION CONTACT: Albert Mercado, Aerospace Engineer, FAA, Small Airplane Directorate, 901 Locust, Room 301, Kansas City, Missouri 64106; telephone: (816) 329-4119; fax: (816) 329-4090; email: albert.mercado@faa.gov.

SUPPLEMENTARY INFORMATION:

Discussion

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to add an AD that would apply to SOCATA Model TBM 700 airplanes. That NPRM was published in the *Federal Register* on December 4, 2013 (78 FR 72834). That NPRM proposed to correct an unsafe condition for the specified products and was based on mandatory continuing airworthiness information (MCAI) originated by an aviation authority of another country. The MCAI states:

During maintenance check, possible unscrewing of rod and piston during operation was detected on a landing gear actuator. Investigation showed that this was likely caused by maintenance operation not conforming with the procedure described in the SOCATA maintenance manual.

Moreover, following in-service landing gear collapse, uncrimping of a right hand main landing gear (MLG) actuator ball joint was detected. Investigation revealed a manufacturing non-conformity of some actuator rod end assemblies.

These conditions, if not detected and corrected, could lead to MLG or nose landing gear (NLG) failure during landing or roll-out and consequent damage to the aeroplane and injury to occupants.

To address this potential unsafe condition, SOCATA issued Service Bulletin (SB) 70-197-32 to require a one-time inspection of the landing gear actuator piston/rod and SB 70-206-32 to require a one-time inspection of the landing gear actuator ball joint centering and, depending on findings, accomplishment of corrective actions.

SOCATA also developed modification 70-0334-32, embodied in production to secure rod/piston assembly through addition of a pin and to reduce retraction /extension indication failure through improvement of switch kinematics. These modified actuators have a new part number (P/N).

For the reasons described above, this AD requires a one-time inspection of the landing gear actuators piston/rod and ball joint centering and, depending on findings, accomplishment of applicable corrective actions.

The MCAI can be found in the AD docket on the Internet at:

<http://www.regulations.gov/#!documentDetail;D=FAA-2013-1019-0002>.

Comments

We gave the public the opportunity to participate in developing this AD. The following presents the comment received on the proposal and the FAA's response to the comment.

Reference correction within the Actions and Compliance section

Catherine Herau of DAHER-SOCATA requested we change the service information references in paragraph (f) of this AD in the Actions and Compliance section to clarify the AD.

We agree with the commenter and changed our final rule AD action to reference the Accomplishment Instructions section of the service information rather than the specific paragraph.

Costs of Compliance

We estimate that this AD will affect 495 products of U.S. registry. We also estimate that it would take about 2 work-hours per product to comply with the basic requirements of this AD. The average labor rate is \$85 per work-hour.

Based on these figures, we estimate the cost of this AD on U.S. operators to be \$84,150, or \$170 per product.

In addition, we estimate that any necessary follow-on actions would take about 3 work-hours for each main landing gear and 3 work-hours for the nose landing gear, and require parts costing \$100 for each rod and assembly. We have no way of determining the number of products that may need these actions.

Authority for This Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. "Subtitle VII: Aviation Programs," describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in "Subtitle VII, Part A, Subpart III, Section 44701: General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

We determined that this AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on

the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify this AD:

- (1) Is not a “significant regulatory action” under Executive Order 12866,
- (2) Is not a “significant rule” under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979),
- (3) Will not affect intrastate aviation in Alaska, and
- (4) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

Examining the AD Docket

You may examine the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating it in Docket No. FAA-2013-1019; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains the NPRM (78 FR 72834, December 4, 2013), the regulatory evaluation, any comments received, and other information. The street address for the Docket Office (telephone (800) 647-5527) is in the ADDRESSES section.

Comments will be available in the AD docket shortly after receipt.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new AD:

2014-06-06 **SOCATA:** Amendment 39-17810; Docket No. FAA-2013-1019; Directorate Identifier 2013-CE-038-AD.

(a) Effective Date

This airworthiness directive (AD) becomes effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

None.

(c) Applicability

This AD applies to SOCATA TBM 700 airplanes, all serial numbers, certificated in any category.

(d) Subject

Air Transport Association of America (ATA) Code 32: Landing Gear.

(e) Reason

This AD was prompted by mandatory continuing airworthiness information (MCAI) originated by an aviation authority of another country to identify and correct an unsafe condition on an aviation product. The MCAI describes the unsafe condition as the landing gear actuator rod and piston becoming unscrewed during operation and the landing gear actuator ball joint becoming uncrimped. We are issuing this AD to detect and correct discrepancies in the pistons/rods and the ball joint centering of the nose landing gear and main landing gear, which could result in landing gear failure and lead to damage of the airplane and occupant injury.

(f) Actions and Compliance

Unless already done, do the actions in paragraphs (f)(1) through (f)(4) of this AD on any airplane with the landing gear actuators part number (P/N) T700A3230050000, P/N T700A323005000000, or P/N T700A323005300000 installed:

(1) Within the next 8 months after [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER] (the effective date of this AD),

perform a detailed visual inspection (DVI) of the pistons and rods of the nose landing gear (NLG) and left hand (LH) and right hand (RH) main landing gear (MLG) actuators and measure the distance following the Accomplishment Instructions in DAHER-SOCATA Mandatory Service Bulletin SB 70-197, dated April 2013.

(2) Within the next 8 months after [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER] (the effective date of this AD), perform a DVI of the ball joint centering of the NLG and LH and RH MLG actuators and measure the ball joint mismatch following the Accomplishment Instructions in DAHER-SOCATA Mandatory Service Bulletin SB 70-206, dated April 2013.

(3) If any discrepancy is found during any inspection required in paragraphs (f)(1) or (f)(2) of this AD, before further flight, replace the affected actuator or rod end assembly if applicable with an airworthy part following the applicable Accomplishment Instructions in DAHER-SOCATA Mandatory Service Bulletin SB 70-197, dated April 2013; and/or DAHER-SOCATA Mandatory Service Bulletin SB 70-206, dated April 2013.

(4) As of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER] (the effective date of this AD), do not install on any airplane a landing gear actuator P/N T700A3230050000, P/N T700A323005000000, or P/N T700A323005300000, unless it is found to be in compliance with the inspection requirements of paragraphs (f)(1) and (f)(2) of this AD. The landing gear actuator must be installed when doing these inspections.

(g) Other FAA AD Provisions

The following provisions also apply to this AD:

(1) **Alternative Methods of Compliance (AMOCs):** The Manager, Standards Office, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. Send information to ATTN: Albert Mercado, Aerospace Engineer, FAA, Small Airplane Directorate, 901 Locust, Room 301, Kansas

City, Missouri 64106; telephone: (816) 329-4119; fax: (816) 329-4090; email: albert.mercado@faa.gov. Before using any approved AMOC on any airplane to which the AMOC applies, notify your appropriate principal inspector (PI) in the FAA Flight Standards District Office (FSDO), or lacking a PI, your local FSDO.

(2) **Airworthy Product:** For any requirement in this AD to obtain corrective actions from a manufacturer or other source, use these actions if they are FAA-approved. Corrective actions are considered FAA-approved if they are approved by the State of Design Authority (or their delegated agent). You are required to assure the product is airworthy before it is returned to service.

(h) Related Information

Refer to MCAI European Aviation Safety Agency (EASA) AD No.: 2013-0227, dated September 23, 2013 for related information. The MCAI can be found in the AD docket on the Internet at: <http://www.regulations.gov/#!documentDetail;D=FAA-2013-1019-0002>.

(i) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless the AD specifies otherwise.

(i) DAHER-SOCATA Mandatory Service Bulletin SB 70-197, dated April 2013.

(ii) DAHER-SOCATA Mandatory Service Bulletin SB 70-206, dated April 2013.

(3) For SOCATA service information identified in this AD, contact SOCATA - Direction des Services – 65921 Tarbes Cedex 9 – France; telephone +33 (0) 62 41 7300, fax +33 (0) 62 41 76 54, or for North America: SOCATA NORTH AMERICA, 7501 South Airport Road, North Perry Airport, Pembroke Pines, Florida

33023; telephone: (954) 893-1400; fax: (954) 964-4141; email: mysocata@socata.daher.com; Internet: <http://mysocata.com>.

(4) You may view this service information at the FAA, Small Airplane Directorate, 901 Locust, Kansas City, Missouri 64106. For information on the availability of this material at the FAA, call (816) 329-4148.

(5) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to:
<http://www.archives.gov/federal-register/cfr/ibr-locations.html>

Issued in Kansas City, Missouri, on March 19, 2014.

James E. Jackson,
Acting Manager, Small Airplane Directorate,
Aircraft Certification Service.

[FR Doc. 2014-06483 Filed 03/27/2014 at 8:45 am; Publication Date: 03/28/2014]